In the claims:

Claim 1 (original): A method for service allocation among a plurality of entities requiring service allocation in a communications or computing environment comprising the steps of:

a) initializing a supply of services of one or more holding entities;

b) endowing one or more bidding entities with an adjustably fixed amount of utility and a requirement for an amount of said supply of services, wherein said fixed amount of utility is a measure representative of the possibility of failure due to lack of resources;

c) negotiating said supply of services of said holding entities, with each bidding entity bidding a selected amount of its said fixed amount of utility;

d) redistribution of said supply of said holding entities among said bidding entities based on said negotiating.

Claim 2 (previously presented): The method of claim 1, wherein said supply of services is comprised of a plurality of resources.

Claim 3 (previously presented): The method of claim 2, wherein said plurality of resources are available at multiple service levels.

Claim 4 (previously presented): The method of claim 1, wherein said initializing, said endowing, said negotiating and said redistribution operate dynamically in response to a change in said supply of services, said fixed amount of utility or said requirement for said supply of services.

Claim 5 (previously presented): The method of claim 1, wherein said redistribution of said supply represents a guarantee of service.

Claim 6 (previously presented): The method of claim 2, wherein said resources are one or more physical devices.

Claim 7 (previously presented): The method of claim 3, wherein said multiple service levels includes said resources available at varying levels of quality.

Claim 8 (previously presented): The method of claim 3, wherein said multiple service levels includes said resources available at varying capacities.

Claim 9 (previously presented): The method of claim 3, wherein said multiple service levels are determined by resource sets.

Claim 10 (previously presented): The method of claim 1, wherein said redistribution is done deterministically.

Claim 11 (previously presented): The method of claim 1, wherein said redistribution is done statistically.

Claim 12 (previously presented): The method of claim 1, wherein said redistribution is based upon a proportion of said supply held by said holding entity using a holding price.

Claim 13 (presently amended): The method of claim 12, wherein said proportion is described by the formula:

$$R_c (1 - P_c / P_b)^{exp}$$, wherein Rc is the current allocation of resource to agent, Pc is the current holding price of resource as held by an individual agent, Pb is the bid price and exp is an exponent.

Claim 14 (original): The method of claim 13, wherein exp=0.5.

Claim 15 (previously presented): The method of claim 1, wherein each said bidding entity is represented by an agent.

Claim 16 (previously presented): The method of claim 15, wherein each said supply of services is represented by an agent.

Claim 17 (previously presented): The method of claim 16, wherein said holding entity is represented by an agent.

Claim 18 (previously presented): The method of claim 6, wherein said physical devices are a plurality of telephones, telephone interface circuits, trunk interface circuits, telephone lines and telephone switches for establishing or maintaining a voice or data communication.

Claim 19 (original): A system for service allocation among a plurality of entities requiring service allocation in a communications or computing environment comprising:

a) one or more holding entities having a supply of services;

b) a plurality of bidding entities endowed with an adjustably fixed amount of utility and a requirement for an amount of said supply of services, wherein said fixed amount of utility is a measure representative of the possibility of failure due to lack of resources;

c) a broker in communication with said holding entities and said bidding entities for negotiating said supply of said holding entities, with each bidding entity bidding a selected amount of its said fixed amount of utility;

wherein said holding entity provides redistribution of said supply among said bidding entities based on said negotiating.

Claim 20 (previously presented): The system of claim 19, wherein said supply of services is comprised of a plurality of resources.

Claim 21 (previously presented): The system of claim 19, wherein said plurality of resources are available at multiple service levels.

Claim 22 (previously presented): The system of claim 19, wherein said holding entities, said bidding entities and said broker operate dynamically in response to a change in said supply of services, said fixed amount of utility or said requirement for said supply of services.

Claim 23 (previously presented): The system of claim 19, wherein said redistribution of said supply represents a guarantee of service.

Claim 24 (previously presented): The system of claim 20, wherein said resources are one or more physical devices.

Claim 25 (previously presented): The system of claim 21, wherein said multiple service levels include said resources available at varying levels of quality.

Claim 26 (previously presented): The system of claim 21, wherein said multiple service levels including resources available at varying capacities.

Claim 27 (previously presented): The system of claim 21, wherein said multiple service levels are determined by resource sets.

Claim 28 (previously presented): The system of claim 19, wherein said redistribution is done deterministically.

Claim 29 (previously presented): The system of claim 19, wherein said redistribution is done statistically.

Claim 30 (previously presented): The system of claim 19, wherein said redistribution is based upon a proportion of said supply held by said holding entities using a holding price.

Claim 31 (presently amended): The system of claim 30, wherein said proportion is described by the formula:

$$R_c \left(1 - P_c / P_b\right)^{exp}$$, wherein Rc is the current allocation of resource to agent, Pc is the current holding price of resource as held by an individual agent, Pb is the bid price and exp is an exponent.

Claim 32 (original): The system of claim 31, wherein exp=0.5.

Claim 33 (previously presented): The system of claim 19, wherein each said bidding entity is represented by an agent.

Claim 34 (previously presented): The system of claim 33, wherein each said supply of services is represented by an agent.

Claim 35 (previously presented): The system of claim 34, wherein said holding entity is represented by an agent.

Claim 36 (previously presented): The system of claim 24, wherein said physical devices are a plurality of telephones, telephone interface circuits, trunk interface circuits, telephone lines and telephone switches for establishing or maintaining a voice or data communication.